

## REMARKS

Attachment I, entitled "Version with Markings to Show Changes Made" sets forth the details of the corrections/changes made to the above-listed specification.

### Brief Discussion of the Invention

The invention involves a sample collection substrate of aerogel and/or xerogel materials bound to a support structure which is used as a solid phase microextraction (SPME) device. The xerogels and aerogels may be organic or inorganic and doped with metals or other compounds to target specific chemical analytes. The support structure may comprise a metal wire such as stainless steel or Kovar®, glass fibers or plastic fibers. Dipping the fiber or wire in an aerogel or xerogel precursor solution and then drying the material may form a device used for solid phase microextraction wherein the xerogel or aerogel covers the entire perimeter of one end of the fiber or wire.

### The May 15, 2002 Office Action

#### Objection to the Disclosure

The disclosure was objected to because the paragraph replaced beginning at line 24 on page 2 of the specification appeared to be incomplete, since it ended with the word "The" and therefore failed to include the last complete sentence of the original paragraph appearing in lines 9-10 on page 3 of the specification. The last portion of the

original paragraph appearing in lines 9-10 on page 3 of the specification has been added by this amendment.

#### Election of Species

Applicants had responded to the restriction requirement by electing the support structure species of a "metal wire". The Examiner pointed out in the May 15, 2002 Office Action that "metal wire" is deemed to be a subgenus, not species, of a support structure and is deemed to include the following patentably distinct species: (1) stainless steel; and (2) alloys of iron, nickel, cobalt and manganese (identified by the trademark Kovar® in the specification). Applicants elect the species of alloys of iron, nickel, cobalt and manganese (identified by the trademark Kovar® in the specification) of a metal wire support structure to be examined on the merits.

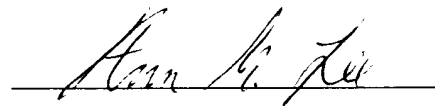
Claim 1, claims 3-12 and new claims 21 and 23 are readable upon the elected species. Claim 22 is directed to the species of stainless steel.

Conclusion

Reconsideration and allowance of claims 1, 3-12, and 21-23 is respectfully requested. The Applicants respectfully submit that no new matter has been introduced by these amendments to the specification.

In the event that the Examiner finds any remaining impediment to the prompt allowance of these claims that could be clarified with a telephone conference, he is respectfully requested to initiate the same with the undersigned at (925) 422-6458.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Ann M. Lee", is written over a horizontal line.

Ann M. Lee

Attorney for Applicant

Registration No. 47,741

Dated: 5-30-02

## ATTACHMENT I

### VERSION WITH MARKINGS TO SHOW CHANGES MADE

#### IN THE SPECIFICATION

The paragraph beginning at line 24, page 2.

An object of the present invention is to provide a solid phase microextraction (SPME) device using aerogel and xerogel materials coated on a support structure, such as a stainless steel or Kovar® wire or glass fiber. It is further an object to provide a device that can be manufactured easily and quickly absorb or adsorb sample fluids – i.e., gases and liquids. Another object is to provide a sample collection medium using aerogel and/or xerogel materials to absorb either a wide range of analytes or selectively target specific analytes; this selectivity can be accomplished by alteration of the sol-gel chemistry and processing techniques used to make the aerogels and xerogels. The present SPME device is robust and formed of materials that are commercially available, inexpensive, and stable under high field radiation and high thermal stress. The aerogel SPME device can easily tolerate the thermal cycling conditions in GC/MS without peeling or releasing interfering compounds.